XI. THE PRESENTATION OF A REPRODUCTION OF DIPLODOCUS CARNEGIEI TO THE TRUSTEES OF THE BRITISH MUSEUM.

In January, 1905, a reproduction of the skeleton of *Diplodocus carnegiei*, which had been made at the Carnegie Museum, under the supervision of the late John B. Hatcher, Curator of Paleontology, and, after his death, under the supervision of Dr. W. J. Holland, Director of the Museum, was forwarded to the Director of the British Museum, (Natural History). In April the Director of the Carnegie Museum, accompanied by Mr. Arthur S. Coggeshall, the Chief Preparator in the Section of Paleontology, arrived at South Kensington and immediately undertook the work of setting up the reproduction upon the bases which had been prepared. Arrangements were made by the Trustees of the British Museum for a formal presentation, to take place on May 12. Invitations were extended to the leading men of science throughout the United Kingdom to be present. At one o'clock on May 12, a distinguished company assembled in the Gallery of Reptiles. The persons present were:

Mr. H. A. Allen, Major Austin Anderson, Mr. W. J. Anderson, Dr. Charles W. Andrews, Miss A. E. Anzolato, Mr. G. J. Arrow, Mr. E. E. Austen, Lord and Lady Avebury, Mr. E. G. Baker, Sir Robert S. Ball, F.R.S., Mr. Frank Bather, Dr. F. A. Bather, Mr. Max Beerbohm, Lord Belhaven and Stenton, Mr. F. J. Bell, H. M. Bernard, Esq., James Bertram, Esq., Mr. S. Bewsher, Col. C. T. Bingham, Sir Alex. R. Binnie, Miss C. Birley, Augustine Birrell, Esq., K.C., Mr. V. H. and Mrs. Blackman, the Rev. J. F. Blake, Mr. W. T. Blandford, F.R.S., Prof. T. G. Bonney, F.R.S., J. L. Bonhote, Esq., Mr. G. A. Boulenger, F.R.S., G. S. Boulger, Esq., T. W. Bridge, F.R.S., Mr. J. Britten, Mr. T. Brock, R.A., Mr. T. Craig Brown, Col. D. Bruce, F.R.S., Dr. Ernest A. T. W. Budge, the Rev. R. Ashington Bullen, Dr. A. G. Butler, Dr. W. T. Calman, Mr. and Mrs. Andrew Carnegie, J. R. Carter, Rt. Hon. Jos. Chamberlain, M.P., Mr. J. F. Cheetham, M.P., Sir William Church, Col. G. Earl Church, John Cleave, Esq., I.S.O., E. A. Clodd, Esq., Mr. A. S. Coggeshall, Sidney Colvin, Esq., Sir Martin Conway, T. A. Cook, Esq., C. T. Cornish, Mr. G. C. Crick, Sir William Crookes, F.R.S.,

Miss Margaret Crosfield, Charles Dawson, Esq., Mrs. Delbanco, W. L. Distant, Esq., Sir Robert K. Douglas, H. E. Dresser, Esq., Hamilton H. Druce, Esq., F.L.S., Herbert Druce, Esq., F.L.S., the Earl of Ducie, Mr. Alfred East, R.A., R. H. Elmendorf, Esq., Mr. and Mrs. C. E. Fagan, Prof. J. B. Farmer, F.R.S., Captain A. Mostyn Field, R.N., H. Haviland Field, Esq., Dr. J. S. Flatt, Mr. L. Fletcher, F.R.S., Sir Walter Foster, M.P., Sir Henry Fowler, G.C.S.I., M.P., Mr. C. G. Gahan, Dr. R. Garnett, C.B., Prof. E. J. Garwood, Sir Archibald Geikie, F.R.S., Mr. A. Gepp, Lieut. Col. H. H. Godwin-Austen, Mr. W. R. Ogilvie Grant, Dr. A. C. Haddon, F.R.S., Sir George F. and Lady Hampson, Miss Hanssen, Mr. J. W. Harmer, F. W. Harmer, Esq., Dr. and Mrs. E. Hartert, Mr. W. H. Helm, Mr. F. A. Heron, Prof. S. J. Hickson, D.Sc., F.R.S., Mr. W. H. R. Holl, John Hopkinson, Esq., E. Howarth, F.R.A.S., F.L.S., J. A. Howe, Esq., Dr. W. E. Hoyle, W. H. Huddleston, Esq., F.R.S., Rev. H. N. Hutchinson and Mrs. Hutchinson, Captain F. W. Hutton, F.R.S., J. F. Isaac, B. Daydon Jackson, Esq., Sir Richard Jebb, M.P., and Lady Jebb, Sir Harry H. Johnston, Prof. J. W. Judd, C.B., F.R.S., Dr. J. Scott Keltie, Hon. Wilson King, Mrs. King, W. F. Kirby, F.L.S., Sir John Kirk, K.C.B., Mr. R. Kirkpatrick, Dr. F. L. Kitchin, H. R. Knipe, Esq., W. D. Lang, Prof. E. Ray Lankester, F.R.S., and Miss Lankester, Dr. J. Larmor, F.R.S., Arthur Lawrence, Esq., Alfred N. Leeds, Esq., and Mrs. Leeds, Thomas Leighton, Esq., Lord Lovat, C.B., C.V.O., D.S.O., the Countess of Lovelace, the Misses Lubbock, R. Lydekker, F.R.S., Miss McGillivray, Sir George Mackenzie, K.C.M.G., C.B., Dr. C. J. Forsyth Major, Sir Clements Markham, K.C.B., F.R.S., E. G. B. Meade-Waldo, Esq., Prof. R. Meldola, F.R.S., Dr. H. R. Mill and Mrs. Mill, Lady Mary Milbanke, Mr. John G. Millais, Miss Milne-Home, Dr. and Mrs. P. Chalmers Mitchell, Bishop Mitchinson, D.C.L., Sir Alfred Moloney, K.C.B., and Lady Moloney, Miss Gladys Moloney, Dr. Frederic Moore, Rt. Hon. John Morley, Mrs. A. R. Moro, Mr. George Murray, F.R.S., Admiral Sir Leopold McClintock, Mr. Bedford McNeill, E. T. Newton, Esq., F.R.S., Mr. R. Bullen Newton, Dr. E. A. Nilson, Baron Nopsca, Miss Oakley, Mr. F. Grant Ogilvie, Dr. F. and Mrs. Penrose, Mr. George Henry Perkins, Mrs. Paul L. F. Perkins, Mr. H. Plowman, R. I. Pocock, Esq., and Mrs. Pocock, Prof. E. B. Poulton, F.R.S., and Mrs. Poulton, Sir Richard Douglas Powell, Bart., K.C.V., A. Pringle, Esq., Mr. G. T. Prior, W. P. Pycraft, Esq.,

Mr. E. T. Reed, Mr. C. T. Regan, Dr. A. B. Rendle, Sir Arthur W. Rücker, F.R.S., F. W. Rudler, Esq., I.S.O., Mr. W. Radcliffe Saunders, Dr. R. F. Scharff, W. Schaus, Esq., Dr. P. L. Sclater, Dr. D. H. Scott, F.R.S., Mr. F. C. Selous, Dr. David Sharp, F.R.S., Miss Emily Bowdler Sharpe, Dr. and Mrs. R. Bowdler Sharpe, Prof. Dr. W. Napier Shaw, F.R.S., Lady Sinclair, E. A. Smith, I.S.O., Mr. G. T. Herbert Smith, Sir Thomas Smith, Bart., K.C.V.O., Mr. L. J. Spencer, the Rev. T. R. R. Stebbing, F.R.S., W. P. D. Stebbing, Esq., Prof. C. Stewart, F.R.S., Major General Stirling, Sir Benjamin Stone, M.P., A. Strahan, Esq., F.R.S., Col. C. Swinhoe, Mr. J. T. Taylor, I.S.O., F. V. Theobald, Esq., Mr. Oldfield Thomas, Prof. D'Arcy W. Thompson, C.B., Sir E. Maunde Thompson, K.C.B., H. Yates Thompson, Esq., and Mrs. Thompson, Prof. W. A. Tilden, V.P.R.S., Sir George Trevelyan, Bart., LL.D., D.C.L., C. W. Wadsworth, Rowland Ward, Mr. C. O. Waterhouse, E. A. Waterbury, Esq., Mr. Wilfred Mark Webb, Prof. W. F. R. Weldon, F.R.S., Mr. H. S. Wellcome, Admiral Sir W. J. L. Wharton, K.C.B., F.R.S., Miss Whitfield, A. F. Wiener, Esq., Dr. E. A. Wilson, Captain D. Wilson Barker, Rt. Hon. Lord Windsor, the Rev. H. H. Winwood, Miss Alice Woodward, Dr. Arthur Smith Woodward, F.R.S., and Mrs. Woodward, Mr. B. B. Woodward, Miss Gertrude Woodward, Dr. Henry Woodward, F.R.S., and Mrs. Woodward, Mr. R. C. Wroughton.

The ceremony was introduced by Professor E. Ray Lankester, the Director, who said,

" My Lords, Ladies, and Gentlemen:

"Through the kindness of Mr. Andrew Carnegie we are about to receive to-day as his gift to this Museum a restoration of the skeleton of the colossal reptile Diplodocus. When the question of finding a place for this interesting specimen arose we resolved that instead of attempting to put it into the Hall of Paleontology, which is already greatly crowded, we would place it in the Gallery of Reptiles.

"In conversation with Mr. Carnegie on one occasion he pointed out to me that all the great progress that has been made in the American Republic has been founded upon ideas, which have germinated, and inventions, which have been really conceived, in England. The American form of government is an unfolding of British thought; the great mechanical triumphs of American manufacturers have been

based upon inventions made in England, which they have perfected; and I may even say that the Diplodocus is an improved and enlarged American form of an English creature, for we have recently discovered in the Oxford clays a specimen of a huge dinosaur not quite as large as the Diplodocus, but in a measure a rival. (Laughter.) You will find the remains of this creature in the Hall of Paleontology.

"I take pleasure in prefacing the occasion by reading a letter addressed to Dr. Holland, Mr, Carnegie's representative, by command of His Majesty the King:

" Buckingham Palace, " 26 April, 1905.

... Sir.

"'I have had the honour of submitting to the King your letter respecting the Skeleton of the Reptile which Mr. Carnegie has sent to London for the Natural History Museum.

"'I am commanded by the King in reply to request you to thank Mr. Carnegie for his kind compliance with the wish which he expressed regarding the disposal of the specimen, and to say that His Majesty would be much obliged to you if you would have the goodness to cause it to be handed over to the Trustees of the British Museum.

"'I am, Sir,
"'Your obedient Servant,
"'KNOLLAS.""

Mr. Lankester then said: "I now have the pleasure of introducing Mr. Andrew Carnegie." (Applause.)

Mr. Carnegie said:

" My Lords and Gentlemen, Trustees of the British Museum:

"You will have seen from the published accounts how it comes about that this gigantic monster makes his appearance and takes up his abode among you. You owe this to one of your former Trustees, who, although no longer of your Board, I am sure retains his interest in your work unimpaired. I refer to His Majesty, who, even in his recreations, seems to keep his eyes and mind ever open for opportunities to advance the interests of his country in every department of national life, from the peace of nations to the acquisitions of your Museum. His Majesty when at Skibo expressed the hope that the Diplodocus before us might some day be seen here. It is a source of much gratification that we across the Atlantic, who owe so much to

your Museum, should be enabled thus to evince our gratitude by adding another to its innumerable attractions. It is doubly pleasing that this should come from the youngest of our Museums on the other side to yours, the parent institution of all, for certainly all those in America may be justly considered in one sense your offspring; we have followed you, inspired by your example. To our Director, Dr. Holland, we owe the discovery of the Diplodocus. He it was who suggested the annual summer holiday to our staff, which really is the hardest work of the year. He it was who conducted the first party to the Far West and organized victory. Success follows him wherever he goes. He suggested that this cast be made, and, as you well know, such was his intense interest in the task that he came over here and gave personal attention to it. He tells me that the cases which contained this duplicate and which were to be returned to Pittsburgh are not going home empty; on the contrary, some are to be filled with things valuable to our Museum of which the Trustees have duplicates. An alliance for peace seems to have been affected,—we are to exchange duplicates, and Shakespeare's words are fulfilled, when 'Distribution shall undo excess' and both still have enough. We are to enrich each other without in the least depleting ourselves, 'as one lamp lights another nor grows less.' This is an alliance indeed which 'blesses him that gives and him that takes.' No dangers dark and unknown lurk in this holy alliance.

"Thus you, Trustees of the old museum, and we, Trustees of the new, are jointly weaving a new tie, another link binding in closer embrace the mother and the child lands, which never should have been estranged, and which, as I see with the eye of faith which knows no doubt, are some day—some day—again to be reunited. (Applause.)

"Gentlemen, Trustees of the British Museum, I now perform one of the most pleasing acts of my life in asking your acceptance of this gift, for which, as I have before explained, you are indebted to His Majesty's abiding interest in your Institution." (Applause.)

Lord Avebury on belief of the Trustees responded. He said:

"My colleagues have done me the honor of requesting me to accept on behalf of the Trustees and to thank Mr. Carnegie in their name for the interesting reproduction of the gigantic Diplodocus, which, at the wise suggestion of His Majesty, who takes so lively an interest in the Museum, he has been good enough to present to us. "About three years ago His Majesty took luncheon with Mr. Carnegie at Skibo Castle, and, being attracted by a drawing of the Diplodocus, which hung upon one of the walls, expressed to Mr. Carnegie a wish that this huge creature might be represented in the British Museum. In response to this suggestion by His Majesty, Mr. Carnegie generously caused a reproduction of the actual skeleton in the Carnegie Museum to be prepared. This we now see before us, and Mr. Carnegie is presenting it to us to-day. It is one more of the splendid gifts which have made his name famous for wise generosity. (Applause.)

"The name Diplodocus would not till a few days ago have conveyed much to most of our countrymen, but the sight of this skeleton will not fail to impress it on them. It is eighty-four feet in length—the most colossal quadruped which has yet been discovered; and it is not likely that any much larger ever existed.

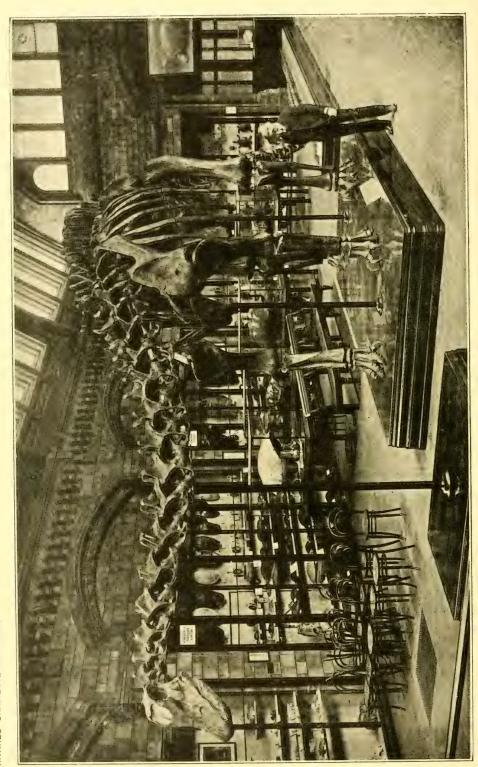
"The size of the animal does not indeed necessarily add much to the interest. Some of the smallest creatures are most important and instructive; some most useful, and even indispensable; and others most destructive and even deadly. Still, size appeals to the imagination, and I doubt not that this specimen will excite the wonder and admiration of all who see it. The creature is remarkable in many ways, but what is perhaps most striking, next to the size of the body, is the relative smallness of the head. The creature had more nervous matter in its hips than in its head, which would seem to indicate that its movements must have been to a considerable extent 'reflex.'

"In this colossal reproduction, of course of the natural size, every piece represents an actual bone, nothing has been left to mere scientific judgment, except, I believe — in one or two cases — the collocation of some of the parts. It is not often that remains so perfect are discovered.

"The Diplodocus flourished in the Jurassic period. A faint idea of its antiquity is given us by the statement that the skeleton once had 15,000 feet of sedimentary deposits over it, which have since been denuded and washed away. In fact it is certainly several millions of years old.

"Again, Mr. Carnegie, I have the pleasure of thanking you on behalf of the Trustees for this remarkable and interesting addition to our National collection. (Applause.)

"We have the pleasure of seeing here Dr. Holland, by whose efforts the original specimens were obtained and by whose skill the



Reproduction of Skeleton of Diplodocus Carnegiei in the Gallery of Reptiles, British Museum (Natural History), South Kensington, London.

skeleton was set up and this cast made, and I am sure it would interest us if he would be so kind as to tell us something about the discovery."

Dr. W. J. Holland, the Director of the Carnegie Museum, said: "My Lords, Ladies, and Gentlemen:

"My good friend, Mr. Carnegie, I fear has attributed to me in his kind remarks, which you have just heard, merit which does not belong to me. I can scarcely lay claim to the discovery of the Diplodocus. The credit of first ascertaining the fact of the existence of such a creature belongs to the late lamented Professor O. C. Marsh and his assistants. Of course I do not pretend to disclaim the fact that the specimen the reproduction of which you see was obtained by myself and those associated with me. But, more than to me, to Mr. Carnegie himself, belongs the credit of the discovery. He has forgotten the laconic message addressed to me on the margin of a newspaper which he sent to me in the fall of 1898, upon which was depicted a sensational picture of a huge dinosaur, which rumor said had been discovered in Wyoming. His command, written in lead-pencil, was, 'Dear Chancellor, Buy this for Pittsburgh.' Of course I endeavored to obey him, but I will not weary you by telling you the story of the adventures which led to the discovery of the specimens, of which you see the reproduction. To Mr. Carnegie's intelligent appreciation of paleontological science and to his generosity, far more than to my humble efforts, are to be attributed the discovery, not only of this great animal, but of a multitude of other strange creatures, the remains of which we have secured for the Museum of which I have the honor to be the Director.

"We are told that Napoleon, addressing his troops just before they went into action in the Battle of the Pyramids, said to them: 'Frenchmen, remember that from yonder heights forty centuries are looking down on you.' Dr. Smith Woodward, Sir Archibald Geikie, and Sir Robert Ball, I think, will not charge me with scientific exaggeration if I say that forty thousand centuries are looking down upon us to-day from this expressionless skull. When this saurian lay down and died, nothing in all nature intimated that his bones at some future time would be resurrected by beings such as we are. Mammalian life at that time was in its infancy. Reptiles dominated the globe.

"The Diplodocus lived in the midst of tropical surroundings. When engaged in digging it up, we found near it the petrified stump of a

palm-tree. The Diplodocus probably lived on the soft, succulent vegetation of the shores and marshes which it haunted. The teeth tell the story. These huge beasts were simply intended to convert vegetable fiber into flesh, upon which the carnivorous dinosaurs of the time fed. On the top of the right tibia you will find the marks of teeth, showing where the bone was crunched and gnawed by a carnivorous dinosaur, and at that very spot we found the fossil tooth of one of these creatures, which had been broken off while it was engaged in feeding upon the carcass of the dead Diplodocus.

"The animal, the skeleton of which you see, represents only one of a number of genera and species of strange reptiles which peopled the earth in Mesozoic times. In the Hall of Dinosaurs in the Museum of the Carnegie Institute in Pittsburgh, it is our wish to assemble and display a series of skeletons representing the more striking forms of dinosaurian life. The present specimen may be regarded as a sort of first fruits of our undertaking. Such an enterprise involves the expenditure of no little labor and of much money. Fortunately, the kindness of our Mæcenas, the distinguished founder and benefactor of the Institute, has never failed to provide the sinews for our scientific war.

"There are some things which I hesitate to say in Mr. Carnegie's presence, but I cannot on this occasion refrain, as a representative of my scientific brethren in many lands, from expressing our enthusiastic admiration for the more than royal beneficence which he has in recent years displayed towards science and its votaries. His noble foundation at Washington and the even more magnificent foundation which he has created in Pittsburgh, the city in which he achieved his fortune, are destined to be enduring monuments to his liberal culture and his desire to promote truth. (Applause.)

"Now in conclusion, my lords, ladies, and gentlemen, I should be false to the promptings of my heart did I not allude tenderly and in terms of highest appreciation to the labors of Professor J. B. Hatcher, my learned colleague, who for fully eighteen months devoted himself to superintending the restoration of the object before us, but who unfortunately was stricken down in the midst of his activities by the hand of death, a premature victim to the hardships and exposures of those expeditions, which Mr. Carnegie, who always sees things from an interesting angle, has designated as 'annual holidays.' Mr. Hatcher was one of the most successful students of palæontology

whom America has produced. I wish also publicly to acknowledge the skill of Mr. Arthur S. Coggeshall, to whom was entrusted the mechanical execution of the restoration. To Professor Lankester, to Mr. C. E. Fagan, to Dr. Arthur Smith Woodward, and the body of gentlemen associated with them, who have in many ways aided us while engaged in the work of setting up the specimen, I desire to return on this occasion my most cordial thanks for all the courtesies which they have shown us and for the help which they have given.

"In conclusion I wish to say that it has been of the greatest benefit to me to have had the opportunity here to consult with your learned men as to the anatomy of this animal, and to find that the accuracy of our researches is in many ways confirmed by the study of the material you already possess under this roof." (Applause.)

Lord Avebury then said, "We have the honor of having with us Sir George Trevelyan, a member of the Board of Trustees of the British Museum, who has been longer in service than any of his colleagues. I am sure we should be pleased to hear from him.'' (Applause.)

Sir George Trevelyan said:

'My Lords, Ladies, and Gentlemen:

"Although I am the oldest member of the Board of Trustees of the British Museum, I can certainly say of myself that I am the least scientific. But although I can lay no claim to special acquaintance with the sciences of geology and paleontology, I rejoice in all the advances that are being made in these and kindred sciences. I desire more particularly to express on this occasion the feeling of admiration which I am sure we all cherish for the magnificent generosity of Mr. Carnegie, another striking proof of which we have in his gift to-day to our Museum of this most interesting specimen. (Applause.)

"Mr. Carnegie is attaining one of the highest forms of happiness in conferring opportunities upon his fellowmen to acquire knowledge. He is not only providing liberally for those who possess a love of reading, but he is doing much to promote the welfare of scientific societies. In all his activity he is serving those who keep their heads above water by their self-denial, thrift, and diligence, a class which deserves best from public benefactors. The Trustees of the British Museum, while they possess two of these virtues, certainly have thrift impressed upon them by a Chancellor of the Exchequer, who grows year by year less generous. (Laughter.)

"Once again I desire on behalf of my colleagues who are the Trustees of this Museum to express our hearty thanks to Mr. Carnegie." (Applause.)

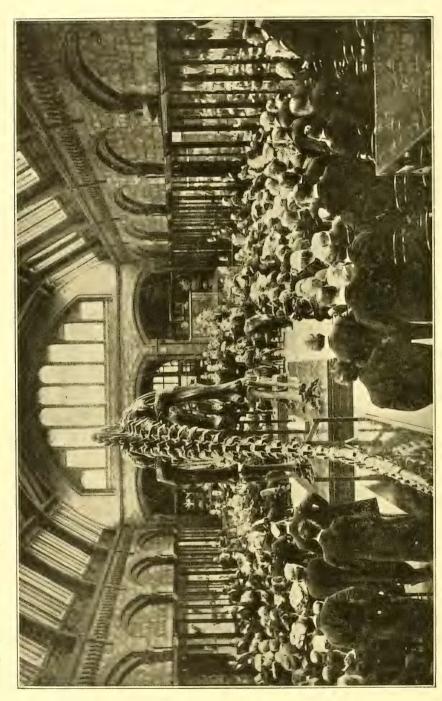
Lord Avebury then introduced Sir Archibald Geikie, F.R.S., and asked him, as representing the geologists of England, to say a few words. Sir Archibald said:

"My Lords, Ladies, and Gentlemen:

"I desire to express my great pleasure in being permitted to be here to-day to testify, as others have already done, to our appreciation of the great kindness of Mr. Carnegie.

"It is a great pleasure to us to possess this gigantic creature in the flesh (Laughter), or at least in the bone (Laughter), and to be able to study the animal in its entirety, and thus to interpret other forms, the separate and fragmentary bones of which hitherto were all that we knew, but the significance of the scattered remains of which now becomes plain to us. It is appropriate that such a monster as this should have lived on a great continent like North America. I have visited America, and I have myself traveled through some parts of the territory in which the remains of these colossal beasts are found. I know something of the wonderful resources of these regions. The men of science in America are to be envied the possession of such a wealth of inspiring material for study as surrounds them. They are making good use of their opportunities. Splendid work was done in former times by Professors Marsh and Cope, and equally fine work is being done to-day by those who are following in their footsteps. Supported by the beneficence of such a far seeing man as Mr. Carnegie, we may expect that the student of paleontology in America will achieve discoveries even surpassing in interest those which have already been made, and that, bit by bit, the wonderful story of the evolution of existing forms of life, through forms, many of them long since extinct, will be deciphered." (Applause.)

After Sir Archibald Geikie had concluded his remarks the assembly rose. The guests were presented to Mr. Carnegie, and the assembled company leisurely examined the skeleton, which appeared to create much interest in the minds of all.



Presentation of the Reproduction of the Skeleton of Diplodocus Carnegiei in the Gallery of Reptiles at the British Museum (Natural History), May 12, 1905. Lord Avebury addressing the audience.